
U.S. Department of the Interior • U.S. Geological Survey

MINERAL INDUSTRY SURVEYS

Gordon P. Eaton, Director

Reston, VA 20192

For information, call:

Dennis Kostick, Commodity Specialist

Telephone: (703) 648-7715, Fax (703) 648-7722

E-mail: dkostick@usgs.gov

Jeff Milanovich (Data), (703) 648-7982

MINES-DATA: (703) 648-7799

MINES FaxBack: (703) 648-4999

Internet: <http://minerals.er.usgs.gov/minerals>

SODA ASH AND SODIUM SULFATE IN DECEMBER 1996

Natural soda ash production in December was 866,000 metric tons, 6% higher than the previous month's production, according to the U.S. Geological Survey. Ending inventories were 271,000 tons, a 5% decrease from that of the preceding month. Wyoming trona production in December was 1,330,000 tons. Total production of chemical caustic soda as soda ash equivalent, based on data from all three producers, was 18,500 tons in December.

Apparent consumption of soda ash for November was

578,000 tons, 6% higher than the November 1995 level of 546,000 tons. Exports and imports of soda ash in November were 255,000 tons and 10,000 tons, respectively.

The cumulative soda ash statistics through November 1996, compared with those of the corresponding period in 1995, were as follows: production 2% lower, imports 28% higher, exports 5% higher, ending stocks 12% higher, and apparent consumption 4% lower.

For further information about the conference, see page 2 and contact:



Mr. Dennis S. Kostick

U.S. Geological Survey

983 National Center

Reston, VA 20192

E-mail: dkostick@usgs.gov

Phone: (703) 648-7715

Fax: (703) 648-7722

Visit our conference website at:

http://minerals.er.usgs.gov/minerals/pubs/commodity/soda_ash/isac.html



ROCK SPRINGS, WYOMING—JUNE 10 to 12, 1997

COSPONSORS:

- UNITED STATES GEOLOGICAL SURVEY
- UNITED STATES BUREAU OF LAND MANAGEMENT
- WYOMING GEOLOGICAL SURVEY

1ST INTERNATIONAL SODA ASH CONFERENCE

To commemorate the 50th anniversary of the beginning of the Wyoming natural soda ash industry, the U.S. Geological Survey, the U.S. Bureau of Land Management, and the Wyoming Geological Survey, are sponsoring a three-day international conference on soda ash to be held at the Western Wyoming Community College in Rock Springs, WY, on June 10 to 12, 1997. The meeting will include two days of formal presentations and poster sessions by some of the world's leading experts in the soda ash industry followed by a third day of field trips to see the trona mines, soda ash refineries, and local outcrops of the Green River Formation. Accommodations will be at the Holiday Inn in Rock Springs, where registration begins Monday, June 9.

The conference is wide-ranging in scope covering several categories, including geology, mining, processing, markets, and environmental issues. Although the Wyoming trona district will be emphasized, papers on natural deposits elsewhere in the world are included. The speakers and titles of the papers to be presented are:

- D. Kostick, U.S. Geological Survey, *History of the U.S. Soda Ash Industry*
T. Leigh, Tg Soda Ash, Inc., *Overview of the Geology of the Wyoming Trona Deposits*
J. Dyni, U.S. Geological Survey, *Exploration for Sodium Carbonate Deposits*
G. Smith, U.S. Geological Survey, *Owens Lake Trona Deposit*
G. Moulton and J. Fairchild, North American Chemical Co., *Geology & Resources of Searles Lake*
Z. Chending, Inner Mongolia Polytechnic Univ., China, *The Natural Soda Deposits of China*
C. Demirci, RTZ Group, Ankara, Turkey, *Beyazari Trona Deposit*
T. Murphy, U.S. Bureau of Land Management, *Terms & Conditions of the Leasing Process of Federal Land*
R. Harris, Wyoming Geological Survey, *Leasing of Trona on State Land*
R. See and N. Brown, Union Pacific Resources, *History of UPRR Trona Leasing*
H. Nagel, Union Pacific Resources, *Trona and Oil and Gas Leasing Conflicts*
R. Hughes, Solvay Minerals, *Discussion of the Mine Collapse at Solvay Minerals*
R. Day, White River Minerals Co., *Solution Mining of Colorado Nahcolite*
A. Ukidwe and H. Haynes, University of Wyoming, *Solution Mining of Trona*
G. Marlatt, Consultant, *Hydrocarbons Associated with Oil Shale and Trona*
W. Hazen, Hazen Research, *The Benetron Process*
R. Aitala, Isonex, Inc., *Process Selection Criteria for Refining Trona to Commercial Products*
R. Frint, *Evolution of Wyoming Soda Ash Processes*
P. Harben, P.W. Harben Inc., and C. Raleigh, Chem-Mineral Marketing Services, *Soda Ash Goes Global for Growth*
T. Whiteside, Harriman Chemsult Ltd., London, *Developments in the European Soda Ash Market - 1990-1996*
B. Rischmiller, Brunner Mond & Co., *Soda Ash-A European Producer's Perspective*
C. Watts-Jones, Chem Systems, *The Soda Ash Industries of Russia and the Ukraine*
J. Chegwiddden, Roskill Information Services, *Asian Soda Ash Markets*

Special luncheon and dinner presentations by:

Mr. D. George Harris, President, Harris Chemical Group

Mr. John Wold, President Wold Trona Co., Inc., *A New Entrant's Perspective of the Wyoming Soda Ash Industry*

Professor Donald Garrett, *Origin of the Wyoming Trona Deposits*

Poster Sessions

S. Wiig, U.S. Bureau of Land Management, *Trona Resources of Wyoming*

N. Brown, Union Pacific Resources, *Computer Modeling of Trona Reserves*

M. Weller, Solvay Minerals, *The Anomalous Zone in Bed 17 of the Solvay Mine*

P. Boni, Univ. of Colorado, *The Geology of Bed 17 in the Solvay Mine*

Field Trips

Trip 1: Underground tour of trona mine(s)

Trip 2: Surface tour of a soda ash refinery(s)

Trip 3: Outcrops of trona-bearing rocks of the Green River Formation, Bill Culbertson, U.S. Geological Survey

Additional papers and poster sessions will be announced in upcoming announcements.(This revision 2/19/97)

TABLE 1
SALIENT SODA ASH AND NATURAL SODIUM SULFATE STATISTICS 1/

Period	Soda ash (Thousand metric tons)		Natural sodium sulfate (Metric tons)	
	Production 2/	Ending stocks	Production	Ending stocks
1995:				
November	876	254	30,100	18,800
December	907	306	26,300	16,400
Total	10,100	XX	327,000	XX
1996:				
January	765	287	26,800	18,200
February	811	329	28,700	18,000
March	790	257	32,400	20,700
April	836	215	24,200	23,400
May	852	260	15,500	11,300
June	859	284	26,400	14,700
July	822	296	22,100	12,300
August	809	264	24,100	15,700
September	823	223	26,000	16,400
October	864	290 3/	30,700	21,200
November	818 r/	285	24,100	14,300
December	866	271	29,500	19,500
Total	9,920	XX	311,000	XX

r/ Revised. XX Not applicable.

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ Production data includes soda ash equivalent from soda liquors only. Soda ash equivalent from mine water is not included. Soda liquors for the current year 1996 are withheld to avoid disclosing company proprietary data.

3/ Because of previously unreported inventory in remote locations by one producer, ending stocks are somewhat higher than the level of prior months.

TABLE 2
U.S. EXPORTS OF SODA ASH AND SODIUM SULFATE 1/

(Metric tons)

Period	Disodium carbonate		Disodium Sulfate				Total	
	Quantity (thousand metric tons)	Value 2/ (thousands)	Salt Cake		Other		Quantity	Value 2/ (thousands)
			Quantity	Value 2/ (thousands)	Quantity	Value 2/ (thousands)		
1995:								
November	275	36,600	1,580	131	487	170	2,070	301
December	286	36,300	10,400	793	192	84	10,600	877
Total (Jan-Nov)	3,290	409,000	49,100	4,070	6,720	2,310	55,800	6,380
Total	3,570	445,000	59,500	4,860	6,910	2,390	66,400	7,250
1996: 3/								
January	300	38,700	4,060	317	108	43	4,160	360
February	314	42,100	14,000	1,040	212	88	14,200	1,130
March	270	35,900	2,000	172	2,350	576	4,340	748
April	349	45,300	8,260	646	31	16	8,290	662
May	217	29,000	104	17	63	38	167	55
June	337	43,800	13,300	1,290	43	17	13,400	1,310
July	315	42,000	12,500	695	29	20	12,600	715
August	392	51,100	2,440	189	6,620	956	9,060	1,150
September	329	44,400	1,690	151	23	8	1,710	159
October	392	53,600	2,060	210	119	679	2,180	889
November	255	34,800	1,190	140	108	545	1,300	685
Total	3,470	461,000	61,600	4,870	9,700	2,990	71,300	7,860

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ Free alongside ship (f.a.s.) value at U.S. ports.

3/ December 1996 data not available at time of publication.

Source: Bureau of the Census, as adjusted by the U.S. Geological Survey, using Journal of Commerce trade data and information.

TABLE 3
U.S. EXPORTS OF SODA ASH BY COUNTRY, 1996 1/

(Metric tons)

Country	January	February	March	April	May	June	July	August	September	October	November	Total Quantity	% of total
Argentina	13,000	--	8,950	--	--	--	22,200	--	17,100	14,100	6,550	82,000	2
Australia	--	--	5,000	--	--	--	5,000	25,100	--	5,070	--	40,200	1
Belgium	6,900	5,610	--	27,600	--	15,000	--	6,010	--	--	67	61,200	2
Bolivia	2,500	--	1,100	--	--	--	1,010	--	--	--	--	4,610	--
Brazil	34	42,300	17,800	7,050	--	--	5,040	28,000	--	52,400	24,000	177,000	5
Canada	16,700	21,300	23,900	14,100	17,300	20,200	26,900	21,700	15,200	19,900	21,800	219,000	6
Chile	21,900	--	19,100	--	17,200	--	24,600	--	17,200	--	--	99,900	3
China	13,000	--	8,000	4,970	4,500	--	4,500	--	--	7,500	--	42,500	1
Colombia	11,700	11,100	--	11,600	--	11,000	10,900	--	11,500	11,800	9,120	88,800	3
Costa Rica	--	--	--	1	--	--	--	--	4,000	--	--	4,000	--
Croatia	--	--	--	8,840	--	5,870	--	7,690	--	11,600	--	34,000	1
Dominican Republic	--	2,160	--	--	--	--	--	--	1,430	--	--	3,590	--
Ecuador	--	--	--	--	--	--	--	--	5,960	--	--	5,960	--
El Salvador	--	--	--	--	--	--	1,000	--	--	--	--	1,000	--
Germany	--	--	124	--	42	--	--	--	--	778	--	944	--
Ghana	--	--	--	--	--	--	16	--	--	--	--	16	--
Guatemala	--	5	3,500	--	--	--	3,300	(2/)	4,920	--	--	11,700	--
Honduras	--	--	--	--	--	--	200	--	--	--	--	200	--
Hong Kong	--	--	40	--	63	71	--	--	--	--	--	174	--
India	--	--	--	--	--	--	--	23,000	--	--	--	23,000	1
Indonesia	23,500	25,500	44,400	42,100	23,600	35,100	26,500	40,100	32,500	52,100	68,200	414,000	12
Ireland	383	--	--	--	392	--	583	583	--	16	--	1,960	--
Israel	--	--	8,000	--	--	--	--	7,910	--	--	6,710	22,600	1
Jamaica	2,000	29	--	--	--	--	1,990	--	--	11	--	4,030	--
Japan	7,900	36,400	--	39,600	11,600	46,400	27,700	26,400	38,600	39,000	7,000	281,000	8
Korea, Republic of	15,100	22,700	5,290	43,600	27,100	30,800	54,800	22,700	21,900	36,400	12,200	293,000	8
Malaysia	10,500	--	--	8,800	12,500	--	9,920	12,400	15,700	--	--	69,900	2
Mexico	33,200	39,300	34,600	32,700	26,800	34,100	28,100	30,900	27,100	28,300	19,400	334,000	10
Netherlands	--	--	2	--	--	101	--	--	19	--	--	122	--
New Zealand	40	20	40	7,070	--	20	4,020	7,000	40	137	81	18,500	1
Nigeria	--	--	--	--	--	--	--	--	--	4,940	--	4,940	--
Panama	--	--	--	--	2,000	--	--	--	--	--	--	2,000	--
Peru	4,020	--	4,140	--	6,230	--	--	--	5,050	--	--	19,400	1
Philippines	12,300	12,300	10,000	--	11,300	13,800	--	13,700	--	20,800	--	94,000	3
Poland	--	--	--	--	--	--	--	--	15,000	--	--	15,000	--
Russia	--	--	--	--	--	--	--	--	299	--	--	299	--
Saudi Arabia	18,000	--	--	17,500	3,790	22,000	22,000	22,000	--	6,760	--	112,000	3
Singapore	--	--	--	4,970	--	--	--	3,000	4,000	--	--	12,000	--
South Africa	--	24,500	27,100	25,000	--	25,100	--	--	22,000	20,000	--	144,000	4
Spain	11,400	--	--	--	16,000	9,300	--	5,960	22,500	--	13,100	78,300	2
Sweden	--	--	--	32	--	--	--	--	36	--	--	68	--
Taiwan	21,700	13,600	21,200	12,900	15,500	--	22,600	17,900	20,500	15,600	7,460	169,000	5
Thailand	23,000	28,000	25,000	8,300	21,500	20,500	12,300	22,800	4,800	24,700	51,800	243,000	7
Trinidad and Tobago	--	--	1,360	--	--	--	--	3,080	--	--	2,930	7,370	--
Turkey	--	--	--	7,310	--	--	--	7,000	--	--	4,970	19,300	1
United Arab Emirates	--	--	--	--	--	--	--	5,000	--	--	--	5,000	--
United Kingdom	--	1	--	--	--	--	1	--	--	--	--	2	--
Uruguay	--	--	1,000	--	--	--	--	--	--	--	--	1,000	--
Uzbekistan	--	--	7	--	--	--	--	--	--	--	--	7	--
Venezuela	30,800	29,200	--	24,500	--	47,900	--	32,400	21,500	20,000	--	206,000	6
Total	300,000	314,000	270,000	349,000	217,000	337,000	315,000	392,000	329,000	392,000	255,000	3,470,000	100

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ Less than 1/2 unit.

Source: Bureau of the Census.

TABLE 4
U.S. IMPORTS OF SODA ASH AND SODIUM SULFATE 1/

(Metric tons)

Period	Disodium carbonate		Disodium Sulfate				Total	
	Value 3/		Saltcake 2/		Other		Value 3/	
	Quantity	(thousands)	Quantity	(thousands)	Quantity	(thousands)	Quantity	(thousands)
1995:								
November	6,240	899	11,000	1,150	5,140	338	16,100	1,490
December	6,480	891	12,400	1,180	3,620	289	16,000	1,470
Total (Jan-Nov)	76,200	11,100	121,000	11,300	69,000	4,960	190,000	16,300
Total	82,700	12,000	134,000	12,500	72,600	5,250	206,000	17,700
1996: 4/								
January	8,130	1,140	12,000	1,120	4,070	276	16,000	1,390
February	7,400	1,050	10,300	966	3,260	279	13,600	1,250
March	9,460	1,330	13,500	1,150	2,920	220	16,400	1,370
April	8,510	1,200	11,200	993	1,950	186	13,100	1,180
May	8,440	1,130	13,700	1,330	1,690	184	15,400	1,510
June	8,770	1,200	14,400	1,400	2,250	342	16,600	1,750
July	8,630	1,180	9,940	987	3,800	405	13,700	1,390
August	8,310	1,140	11,700	1,110	2,940	270	14,600	1,380
September	10,500	1,440	14,400	1,400	1,550	193	15,900	1,590
October	9,340	1,260	12,200	1,200	1,300	163	13,500	1,360
November	10,000	1,380	11,600	1,120	1,460	173	13,000	1,300
Total	97,500	13,400	135,000	12,800	27,200	2,690	162,000	15,500

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ Includes Glauber's salt.

3/ Customs, insurance, and freight (c.i.f) value at U.S. ports.

4/ December 1996 data not available at time of publication.

Source: Bureau of the Census.

TABLE 5
U. S. APPARENT CONSUMPTION OF SODA ASH 1/

(Metric tons)

Period	Production	Imports	Exports	Net stock		Apparent consumption 2/
				Increase	or Decrease	
1995:						
November	876,000	6,240	275,000	61,000	--	546,000
December	907,000	6,480	286,000	52,000	--	575,000
Total (Jan-Nov)	9,190,000	76,200	3,290,000	51,000	--	5,930,000
Total	10,100,000	82,700	3,570,000	103,000	--	6,510,000
1996:						
January	765,000	8,130	300,000	--	19,000	493,000
February	811,000	7,400	314,000	42,000	--	462,000
March	790,000	9,460	270,000	--	72,000	602,000
April	836,000	8,510	349,000	--	42,000	538,000
May	852,000	8,440	217,000	45,000	--	598,000
June	859,000	8,770	337,000	24,000	--	506,000
July	822,000	8,630	315,000	12,000	--	503,000
August	809,000	8,310	392,000	--	32,000	457,000
September	823,000	10,500	329,000	--	41,000	546,000
October	864,000	9,340	392,000	67,000	--	415,000
November	818,000 r/	10,000	255,000	--	5,000	578,000
December	866,000	NA	NA	--	14,000	NA
Total (Jan-Nov)	9,050,000	97,500	3,470,000	--	21,000	5,700,000

r/ Revised. NA Not available.

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ Production plus imports minus exports plus or minus stock changes.